IN THE CLAIMS:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please AMEND claims 6, 7, 12, 13, 18, 19 and 24 and ADD new claims 25-34 in accordance with the following:

1. (Original) A recording medium comprising a high melting point recording layer between first and second dielectric layers.

2. (Original) The recording medium of claim 1, wherein the high melting point recording layer is formed of tungsten.

3. (Original) The recording medium of claim 1, wherein the high melting point recording layer is formed of tantalum.

4. (Original) The recording medium of claim 1, wherein the high melting point recording layer is formed of a tungsten compound.

5. (Original) The recording medium of claim 1, wherein the high melting point recording layer is formed of a tantalum compound.

6. (Currently Amended) The recording medium of ~~any one of~~ claims ~~1 through 5~~, further comprising a reflective layer ~~underneath~~on the second dielectric layer.

7. (Currently Amended) A method of recording and/or reproducing information on/from a recording medium having a high melting point recording layer between first and second dielectric layers, the method comprising irradiating a laser beam onto the recording medium to induce reaction and diffusion in the high melting point recording layer and the first and second dielectric layers.

8. (Original) The method of claim 7, wherein the high melting point recording layer is formed of tungsten.

9. (Original) The method of claim 7, wherein the high melting point recording layer is formed of tantalum.

10. (Original) The method of claim 7, wherein the high melting point recording layer is formed of a tungsten compound.

11. (Original) The method of claim 7, wherein the high melting point recording layer is formed of a tantalum compound.

12. (Currently Amended) The method of ~~any one of~~ claims ~~7 through 11~~, wherein the recording medium further comprises a reflective layer ~~underneath~~on the second dielectric layer.

13. (Currently Amended) An apparatus ~~of~~ reproducing information from a recording medium having a high melting point recording layer between first and second dielectric layers, the apparatus generating plasmon using crystalline particles of the high melting point recording layer and the first and second dielectric layers as a scattering source to reproduce information recorded in the recording layer using a super-resolution near-field structure regardless of ~~the~~a diffraction limit of a laser.

14. (Original) The apparatus of claim 13, wherein the high melting point recording layer is formed of tungsten.

15. (Original) The apparatus of claim 13, wherein the high melting point recording layer is formed of tantalum.

16. (Original) The apparatus of claim 13, wherein the high melting point recording layer is formed of a tungsten compound.

17. (Original) The apparatus of claim 7, wherein the high melting point recording layer is formed of a tantalum compound.

18. (Currently Amended) The apparatus of ~~any one of~~ claims 13 ~~through 17~~, wherein the recording medium further comprises a reflective layer ~~underneath~~on the second dielectric layer.

19. (Currently Amended) A method of reproducing information from a recording medium having a high melting point recording layer between first and second dielectric layers, the method comprising generating plasmon using crystalline particles of the high melting point recording layer and the first and second dielectric layers as a scattering source to reproduce information recorded in the recording layer using a super-resolution near-field structure regardless of ~~the~~a diffraction limit of a laser.

20. (Original) The method of claim 19, wherein the high melting point recording layer is formed of tungsten.

21. (Original) The method of claim 19, wherein the high melting point recording layer is formed of tantalum.

22. (Original) The method of claim 19, wherein the high melting point recording layer is formed of a tungsten compound.

23. (Original) The method of claim 19, wherein the high melting point recording layer is formed of a tantalum compound.

24. (Currently Amended) The method of ~~any one of~~ claims ~~19 through 23~~, wherein the recording medium further comprises a reflective layer ~~underneath~~on the second dielectric layer.

25. (New) A high-density recording medium comprising:

a polycarbonate layer;

a first dielectric layer;

a recording layer; and

a second dielectric layer, wherein crystalline particles of the recording layer and the first and second dielectric layers generate surface plasmon when reproducing information of the high-density recording medium.

26. (New) The high-density recording medium of claim 25, wherein the recording layer is a high melting point recording layer.

27. (New) The high-density recording medium of claim 25, wherein the recording medium is irradiated with a laser beam of approximately 11 mW and 405 nm wavelength, heating the recording layer to approximately 600°C.

28. (New) The high-density recording medium of claim 25, wherein the recording layer comprises tungsten, tantalum, a tungsten compound, and/or a tantalum compound.

29. (New) The high-density recording medium of claim 25, further comprising a reflective layer formed on the second dielectric layer.

30. (New) The high-density recording medium of claim 29, wherein the reflective layer comprises aluminum and/or silver.

31. (New) A method of recording and/or reproducing information from and/or on a recording medium having a recording layer formed between first and second dielectric layers, the method comprising:

irradiating the recording medium with a laser beam;

heating the recording layer inducing a reaction and diffusion in a laser-irradiated domain;

forming crystalline particles in the recording layer and the first and second dielectric layers; and

recording and/or reproducing information on the information medium in the form of marks smaller in size than a diffraction limit of the laser beam.

32. (New) The method of claim 31, wherein the laser beam irradiating the recording medium is of approximately 11 mW and 405 nm wavelength.

33. (New) The method of claim 32, wherein the recording layer is heated to approximately 600°C.

34. (New) The method of claim 31, wherein the recording and/or reproducing of the information on the recording medium is achieved with a carrier to signal ratio (CNR) of approximately 45 dB for a mark length of 170 nm.